XV.—List of Reptilia and Amphibia collected by the late Dr. Stoliczka in Kashmir, Ladák, Eastern Turkestán, and Wakhán, with descriptions of new Species.—By W. T. Blanford, F. R. S., F. Z. S.

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The following list of the Reptilia and Amphibia in Dr. Stoliczka's collections is similar to that of the Mammalia already printed in this Journal (ante, p. 104), and is similarly published in anticipation of full accounts, which cannot be issued until the accompanying illustrations are ready. It is proposed to figure all new species.

The country traversed by Sir D. Forsyth's mission, to which Dr. Stoliczka was attached as naturalist, may be considered as consisting of the following zoological subdivisions:—hills between the Panjáb and Kashmir, the Kashmir valley, Ladák (the upper Indus valley, extending to the Karakoram), the Kuenluen range south of Yárkand, Eastern Turkestán (comprising the plains around Yárkand and Káshghar), Sarikol (the hilly country between the Turkestán plains and the Pámir and Wakhán).

The collections would, doubtless, have been much larger had not a great portion of the country been traversed in the depth of winter, when the ground was covered with snow, and no reptiles could be seen. None were consequently obtained on the southern slopes of the Thian Shan mountains nor on the Pámir.

The only orders of *Reptilia* represented are those of lizards and snakes. No tortoises were met with.

REPTILIA.

LACERTILIA.

- 1. Stellio Himalayanus.—Ladák.
- 2. S. TUBERCULATUS.—Hills between the Panjab and Kashmir.
- 3. S. AGRORENSIS.—Jhilam valley, Kashmir.
- 4. S. STOLICZKANUS, sp. nov.
- S. squamis dorsalibus mediis majoribus, haud in lineas regulares ordinatis, obtuse carinatis, lateralibus minoribus, acute carinatis, postice subæqualibus; nonnullis mucronatis circum tympanum, et in fasciculos ad latera
 colli et supra humeros dispositis; caudalibus carinatis, mucronatis verticillatis, dorsales vix magnitudine excedentibus; stramineus, capite dorsoque
 posteriore nigro-punctatis, dorso anteriore nigro, stramineo transversim
 fasciato.

Hab.—Plains of Eastern Turkestán.

The distribution of the scales on the back is somewhat as in S. Caucasiens, but that appears to be a stouter form with far more enlarged scales on the sides, larger tail scales, and a patch of thickened scales in the middle of the abdomen which is wanting in the form now described. The present species may be near S. Aralensis (Agama Aralensis, Licht. in Eversmann's 'Reise nach Buchara', p. 144), the only other steppe form known, but that species is described as being very differently coloured, as having the toes fringed, and the dorsal scales strongly keeled and pointed.

5. Phrynocephalus Theobaldi.

- P. Theobaldi, Blyth, J. A. S. B., 1863, XXXII, p. 90.
- P. caudivolvulus, Günther, Rept. Brit. Ind. p. 161, nec Pallas.
- P. Stoliczkai, Steindachner, Novara-Expedition, Reptilien, p. 23, Pl. I, Fig. 6, 7.
- P. caudivolvulus and P. Forsythi, Anderson, P. Z. S., 1872, pp. 387, 390.

Hab. Ladák; Kuenluen; Eastern Turkestán; Sarikol.

After going through the various descriptions of Lacerta caudivolvula by Pallas, Eversmann, and Eichwald, and comparing their figures with the Tibetan species, I am satisfied that the form originally described by Pallas is different, and that it is probably one of the smooth species like P. maculatus and P. axillaris, both of which have a habit of coiling their tails, whilst P. Theobaldi has never been observed to do so. The markings on the tail in all Phrynocephali are very constant and those of the true P. candivolvulus are different from those of P. Theobaldi. It is impossible to enter at length into this subject here, but in the full account of the species I shall give my reasons in full for changing the name.*

Although the form called by Dr. Anderson P. Forsythi appears distinct at first and is, as a rule, differently coloured on the body, I can find no constant distinction from P. Theobaldi.

6. P. AXILLARIS, sp. nov.

P. major, lævis, cauda elongata, pede anteriore in adulto vix femur attingente, squamis omnibus lævibus, caudæ apicem versus exceptis; supra grisens, maculâ rubrâ ntrinque post axillam notatus, membris candaque fasciis fuscis transversis signatis, hac ad medium fusco-annulatâ, nunquam ad apicem nigrâ, subtus albidus. Long. tota poll. 5—6, caudæ $\frac{3}{5}$ totius longitudinis subæquante.

* I should, however, mention that I think there is reason to doubt whether the specimens assigned to *P. caudivolvulus* in the Berlin Museum are rightly named. It was upon Dr. Peters's comparison of Tibetan specimens with the former that Dr. Günther based his identification. At all events, the characters of a specimen from the Berlin Museum described by Dumeril and Bibron differ from the original description given by Pallas.

Hab.—Eastern Turkestán, in the plains.

A large, rather long-tailed species, with the same structure as *P. maculatus* and the same habit of coiling its tail. It is distinguished, when adult, by its limbs being shorter and the toes less fringed, and by colouration. *P. axillaris* has a red spot behind each shoulder so as to be partly concealed by the fore limb when laid back and it never has the tip of the tail black whilst *P. maculatus* always has.

7. TERATOSCINCUS KEYSERLINGII.—Eastern Turkestan.

8. GYMNODACTYLUS STOLICZKÆ.

Cyrtodactylus Yarkandensis, Anderson. P. Z. S., 1872, p. 381.

Hab.-Ladák.

From an examination of Dr. Anderson's type specimen, I have ascertained that it is identical with the species previously described and figured by Steindachner (Rept. Nov. Exp. p. 15, Pl. II, fig. 2). I also think that Dr. Anderson must have been misinformed as to the original locality of the specimen he described, for the species abounds in Ladák, whilst it is replaced by other forms of the genus at Yárkand.

9. G. ELONGATUS, sp. nov.

G. elongatus, corpore gracili, caudá attenuatá, membris exilibus, dorso tuberculis majoribus latis confertis ornato, inter tuberculas squamis rotundis parvulis induto, caudá subtus scutis majoribus instructá, verticillatá serie ultimá verticilli cujusque ex squamis majoribus carinatis superne et ad latera omnino compositá, poris præanalibus ad 5; griseus transverse fusco fasciatus. Long. poll. 5, caudæ 2.8.

Hab.-Yangihissar, Eastern Turkestán.

A peculiarly elongate form of the group of *G. Caspius*, distinguished from that and all allied species by its slenderness and by the peculiarity of the tail having no spinose tubercles, but only the last row of scales in each ring enlarged and carinate without any intervening small scales.

10. G. MICROTIS, sp. nov.

G. parum robustus, capite brevi, depresso, meatu auditorio minimo; caudâ attenuatâ, lævi, haud verticillatâ, membris breviusculis; dorso granulato, tuberculis subcarinatis ornato; arenarius, fusco minute punctatus, subtus albescens. Long. tota 3.2 poll., caudæ 1.8.

Hab.—Eastern Turkestán.

A small sandy coloured species with a smooth tail and the back tuberculated. It is remarkable for its very small ear-orifice. It appears to be a house-gecko and was found about old walls. It is probably allied to the species described by Pallas under the name of *Lacerta pipiens*, but that

is said by its describer to have all the back scales granular, and to be marked with angulate cross bands.

11. Eremias Yarkandensis, sp. nov.

E. caruleo-ocellata, Anderson, P. Z. S., 1872, p. 373, nec Dum. et Bib.

E. gracilis, supra grisea vel olivacea, nigro-maculata, ocellis albidis nigro marginatis utrinque ad dorsum in seriem longitudinalem dispositis; subtus albida; scutis nasalibus haud tumidis, præfrontali unico, a rostrali supranasalibus atque a verticali postfrontalibus longe disjuncto; infra-orbitali ad labrum pertinente; dentibus palatalibus nullis; scutis ventralibus in series longitudinales (potius obliquas) 14—16, et in transversas ad 30 dispositis; poris femoralibus utrinque 9—14, squamis infradigitalibus vix carinatis. Long. 6 poll., caudæ 3.7.

Hab.—Eastern Turkestán.

This species was referred by Dr. Anderson to *E. cœruleo-ocellata* of Dumeril and Bibron, but it appears to me to differ in having the nasal shields not swollen, the dorsal scales closer together, almost without intervening granules, and, I think, in being more slender. *E. cœruleo-ocellata* has the tail scales keeled; as a rule they are smooth in the basal portion in *E. Yarkandensis* but the character is not constant. This species appears more closely allied to *E. multiocellata* Günther and may perhaps be identical, but that form is described as having an azygos shield between the postfrontals, an enlarged shield in the middle of the collar, and 18 rows of scales across the belly. I scarcely think, too, that Dr. Günther would have omitted to mention the absence of tumidity in the nasal shields which distinguishes *E. Yarkandensis* from other forms of the genus.

11a. E. YARKANDENSIS, VAR. SATURATA.

E. Yarkandensis magis infuscata, scuto infra-orbitali diviso, parte superiori a labro discreto.

Hab -Valleys of the Kuenluen range, south of Yárkand.

This differs from the type in having the infra-orbital shield divided, and in darker colour. Neither character, however, is quite constant, and there is one dark specimen with the infra-orbital undivided.

12. Eremias vermiculata, sp. nov.

E. supra grisea, nigro-vermiculata, subtus albida, elongata, gracilis; dorso granulosa, scutis nasalibus tumidis, præfrontali unico a rostrali supranasalibus atque a verticali postfrontalibus longe disjuncto; supra-orbitalibus convexis, omnino squamis minimis rotundis circumdatis; infra-orbitali late ad labrum pertinente, dentibus palatalibus nullis; scutis ventralibus in series 16—20 longitudinales (potius obliquas), atque 36—41 transversus dispositis; poris femoralibus utrinque 19—23; squamis infradigitalibus vix carinatis. Long. 7·4 poll., caudæ 5·1.

Hab.—Eastern Turkestán.

Allied to the last, but more slender with a longer tail and longer limbs. It has more numerous ventral scales and femoral pores, swollen nasal shields, the supraorbital disk surrounded by granules, and different colouration.

13. EUMECES TÆNIOLATUS.—Between Mari in the Panjáb and Kashmir.

A single specimen 13 inches long, stouter than the type, and with 23 rows of scales round the body.

- 14. Mocoa Himalayana.—Mari, Panjáb; Kashmir.
- 15. M. STOLICZKAI (? = M. Ladacensis).

Euprepes Stoliczkai and E. Kargilensis, Steindachner, Novara Expedition, Reptilian, pp. 45, 46.

Eumeces Ladacensis, Anderson, P. Z. S., 1872, p. 375.

Hab.-Ladák.

I am unable to identify this species satisfactorily with Eumeces Ladaceensis, Günther, because in not one out of the twenty-four specimens collected does the forefoot reach the end of the snout. Anderson also noticed this Still I think it probable that the two are identical.* E. Kargilensis was chiefly distinguished by Steindachner because of its having 4 instead of 5 supralabials before the infraorbital. In some specimens collected there are 4 on one side and 5 on the other.

OPHIDIA.

16. Typhlops porrectus?—Jhilam valley between Mari and Kashmir.

This appears stouter than the type and may be distinct. Only a single specimen was obtained.

- 17. Compsosoma Hodgsoni.—Kashmir.
- 18. PTYAS MUCOSUS.—Kashmir.
- 19. Zamenis Ravergieri.

Colubur Ravergieri, Men. Cat. Rais. p. 69, (1832).

Zamenis caudælineatus Günther, Cat. Col. Snakes, Brit. Mus., p. 104 (1858).

Z. Ravergieri and Z. Fedtschenkoi, Strauch, Schlangen des Russischen Reichs, Mem. Acad. Sci. St. Pet. XXI, No. 4, p. 127 (1873).

Hab.—Eastern Turkestán.

The colouration of the three specimens obtained is that of the variety called by Strauch Z. Fedtschenkoi, in which the tail is spotted instead of being striped. In describing the specimens found in Persia, I have shewn that the two forms pass into each other.

* The locality of *E. Ladacensis*, Günth. Rept. Brit. Ind. p. 88, rests upon the authority of the Messrs. Schlagintweit, and consequently no reliance can be placed upon its accuracy.

- 20. Tropidonotus hydrus.—Eastern Turkestán.
- 21. T. PLATYCEPS .- Mari and Kashmir.
- 22. TAPHROMETOPUM LINEOLATUM.—Eastern Turkestán.
- 23. VIPERA OBTUSA.

V. Euphratica, Martin, P. Z. S., 1838, p. 82.

V. obtusa, Dwigubsky, teste Strauch Mem. Acad. St. Pet. XXI, No. 4, p. 221.

24. HALYS HIMALAYANUS.—Mari and Kashmir.

AMPHIBIA. BATRACHIA.

- 1. RANA CYANOPHLYCTIS.—Between Mari and Kashmir.
- 2. DIPLOPELMA CARNATICUM.—Tináli between Mari and Kashmir.
- 3. Bufo viridis.—Kashmir; Eastern Turkestán; Wakhán.
- 4. B. CALAMITA ?-Kashmir.

XVI.—Notes on a few new Oaks from India.—By S. Kurz. (With Plate XIV.)

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Some time ago I received, through the kindness of Capt. J. Waterhouse, two acorns collected by Capt. W. G. Hughes, Deputy Commissioner of the hill-districts of Arracan. They were obtained in the hills of Arracan at some 5000 or 6000 ft. elevation and proved interesting, the one as being a full-grown acorn of Quercus mespilifolia, a species previously known only from Ava and Prome and which I have hitherto considered (see Flora, 1872, p. 398) to be only a variety of Q. semiserrata, but which I must now acknowledge as an entirely distinct species; the other as being a young specimen of a new species of which a full-grown cluster of acorns from Assam exists in the Calcutta Herbarium. I have in vain tried to obtain either flowers or leaves of this species from the Khasya Hills, and, consequently, am compelled to name and describe it solely from the fruit. I have to do the same in the case of to Q. olla, another new species from Assam. The figures, however, will, I hope, assist in their future identification. I take this opportunity of giving descriptions of a few other new species collected by myself and others in the Sikkim Himalaya and Burma.

1. QUERCUS XYLOCARPUS, nov. sp., Pl. XIV, Figs. 5-8.

Fructus per 2—3 in massam irregulariter obovoideam 1—2 poll. in diametro connati; nuces apice tantum liberæ, depresso-globosæ, læves; cupulæ dum immaturæ nuces omnino includentes demum circulariter apertæ et nucis